

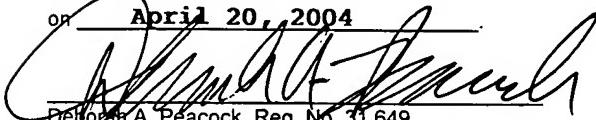


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Deborah A. Peacock, Reg. No. 31,649

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/661,319
Applicant(s) : Robert L. Armstrong, et al.
Filed : September 12, 2003
Title : OPTICAL DEVICES AND METHODS EMPLOYING NANOPARTICLES,
MICROCAVITIES AND SEMICONTINUOUS METAL FILMS

TC/A.U. : 2877
Examiner :

Docket No. : 37000-9906

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INFORMATION DISCLOSURE STATEMENT

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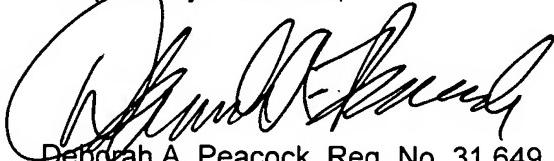
Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO 1449 submitted herewith. A copy of each of the listed references is also enclosed.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior references" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

This Information Disclosure Statement is being filed within three months of the filing date of the application or prior to the mailing date of a first Office action. Therefore, no fee or certification is required. 37 C.F.R. § 1.97(b).

Respectfully submitted,



Deborah A. Peacock, Reg. No. 31,649
Direct line: (505) 998-1501

Enclosures: PTO Form(s) 1449;
Copy of Reference(s)

Peacock, Myers & Adams, P.C.
Attorneys for Applicant
P.O. Box 26927
Albuquerque, NM 87125-6927
(505) 998-1500
FAX (505) 243-2542
Customer No. 005179

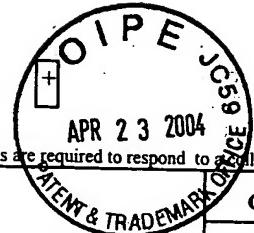
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Application Number	10/661,319
Filing Date	September 12, 2003
First Named Inventor	ARMSTRONG, et al.
Group Art Unit	2877
Examiner Name	

Sheet	1	of	15	Attorney Docket Number	37000 CIP2 9906
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U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		5,249,195		L.C. Feldman, et al.	09/28/1993	
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		5,527,712	A	T.M. Sheeny	06/18/1996	
		4,781,458		S.M. Angel, et al.	11/01/1988	
		4,828,758		G.E. Gillberg-LaForce, et al.	05/09/1989	
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		5,237,211		K.T. Carron, et al.	07/05/1994	
		5,405,710		A. Dodabalapur, et al.	04/11/1995	

FOREIGN PATENT DOCUMENTS

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[F:\ANNETTE\NMSUT-Armstrong-p1-1449.PTO.doc] 37000-9906

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Application Number	102661,319
Filing Date	September 12, 2003
First Named Inventor	Armstrong, et al.
Group Art Unit	2877
Examiner Name	

Sheet	2	of	15	Attorney Docket Number	37000 CIP2 9906
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		5,405,906		A.W. Olsen, et al.	04/11/1995	
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		5,853,464		I.A. Macpherson, et al.	12/29/1998	
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				Examiner Name	
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		5,377,219		A	A.R. Geiger	12/27/1994	
		5,777,776			T. Hiraga, et al.	07/07/1998	
		5,847,816		A	M.S. Zediker, et al (Otaguro)	12/08/1998	
		5,952,655			R.N. Bhargava	09/14/1999	

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		EP 0 527 551 A1			Hitachi, Ltd.	17.02.1994	
		WO 91/20078 A1			BASF Aktiengesellschaft	26.12.1991	

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Sheet	4	of	15	Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	2877
				Examiner Name	
				Attorney Docket Number	37000 CIP2 9906

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Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		V. M. Shalaev, <i>Nonlinear Optics of Random Media: Fractal Composites and Metal-Dielectric Films</i> , Springer Tracts in Modern Physics, v.158, Springer, Berlin Heidelberg 2000.	
		A. K. Sarychev and V. M. Shalaev, "Field Distribution, Anderson localization, and optical phenomena in random metal-dielectric films," Chapter in: <i>Optics of Nanostructured Materials</i> , Eds: V.A. Markel and T.F. George, Wiley, 2001.	
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		V. A. Podolskiy, A. K. Sarychev, V. M. Shalaev, "Temporal Dynamics of Local Optical Responses and Sub-fs Pulse Generation in Semicontinuous Metal Films," Laser Physics 12, 292 (2002).	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT			
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Sheet	5	of	15
COMPLETE IF KNOWN			
Application Number		10/661,319	
Filing Date		September 12, 2003	
First Named Inventor		ARMSTRONG, et al.	
Group Art Unit		2877	
Examiner Name			
Attorney Docket Number		37000 CIP2 9906	

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		V. A. Podolskiy, A. K. Sarychev, and Vladimir M. Shalaev, Percolation Composites: Localization of Surface Plasmons and Enhanced Optical Nonlinearities, in Photonic Crystals and Light Localization in the 21st Century, 567, ed. by C. M. Soukoulis (Kluwer Academic Publishers, 2001).	
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		V. A. Shubin, A.K.Sarychev, J. P. Clerc, and V.M.Shalaev, Local Electric And Magnetic Fields In Semicontinuous Metal Films, Phys. Rev. B62, 11230 (2000).	
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				Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	
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		S. Gresillon, L. Aigouy, A. C. Boccara, J. C. Rivoal, X. Quelin, C. Desmarest, P. Gadenne, V. A. Shubin, A. K. Sarychev, and V. M. Shalaev, Experimental Observation of Localized Optical Excitations in Random Metal-Dielectric Films, Phys. Rev. Lett. 82, 4520 (1999).	
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Sheet	7	of	15	Attorney Docket Number	37000 CIP2 9906

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		S. I. Bozhevolnyi, V. A. Markel, V. Coello, W. Kim, and V. M. Shalaev, Direct Observation of Localized Excitations on Rough Nanostructured Surfaces, Phys. Rev. B 58, 11441 (1998).	
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		Vladimir M. Shalaev, Mark I. Stockman, and R. Botet, Resonant excitations and nonlinear optics of fractals, Physica A 185, 181 (1992).	
		Vladimir M. Shalaev, R. Botet, and R. Jullien, Erratum: Resonant light scattering by fractal clusters, Phys. Rev. B 45, 7592 (1992).	
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Sheet	9	of	15	Filing Date	September 12, 2003
				First Named Inventor	ARMSTRONG, et al.
				Group Art Unit	2877
				Examiner Name	
				Attorney Docket Number	37000 CIP2 9906

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		R. L. Armstrong, V. P. Safonov, N. N. Lepeshkin, W. Kim, and V. M. Shalaev, Giant optical nonlinearities of fractal colloid aggregates, SPIE, San Diego, p. 107, 1997	
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		SHALAEV, V.M., et al., "Electromagnetic Properties of Small-Particle Composites," <i>Phys. Reports</i> , vol. 272, pp 61-137 (1996)	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/661,319
(use as many sheets as necessary)				Filing Date	September 12, 2003
				First Named Inventor	Armstrong, et al.
				Group Art Unit	2877
				Examiner Name	
Sheet	12	of	15	Attorney Docket Number	37000 CIP2 9906

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		SHALAEV, V.M., "Nonlinear Optical Phenomena in Nanostructured Fractal Materials," <i>J. Nonlinear Op. Phys. & Mat.</i> , vol. 7, No. 1, pp 131-152 (1998)			
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		BERGER, A.J., et al., "Feasibility of Measuring Blood Glucose Concentration by Near-Infrared Raman Spectroscopy," <i>Spectrochimica Acta Part A</i> Vol.53, pp 287-292 (1997)	
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		WEBER, W.H., "Raman Scattering Becomes More Accessible," <i>Amer Inst of Phys</i> .pp 12/14 (Oct 2000)	

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		BURSTEIN, E., et al., Editors, CONFINED ELECTRONS AND PHOTONS, Textbook published by Plenum Press (NY and London), from Proceedings of a NATO Advanced Study Institute on Confined Electrons and Photons: New Physics and Applications, held July 13-26, 1993, Erice, Italy (1995 Plenum Press New York)	
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